

Summary of Changes to
KENTUCKY MINIMUM SPECIFICATION FOR SCHOOL BUSES
 2010 EDITION

1. Page 22, Add to chart the Cummins ISB as a standard engine. Delete Caterpillar C-7 and Mercedes MBE 900 due to non-availability.

ENGINE

The chassis shall be equipped with one of the following diesel engines:

Engine	Horsepower	Chassis
INTERNATIONAL MAXFORCE DT466	190	34-52 PASSENGER TYPE "C"
INTERNATIONAL MAXFORCE 7	175	34-52 PASSENGER TYPE "C"
INTERNATIONAL MAXFORCE DT466	215	66-72 PASSENGER TYPE "C"
INTERNATIONAL MAXFORCE 7	200	66 PASSENGER TYPE "C"
INTERNATIONAL MAXFORCE DT466	215	66-78 PASSENGER "FC"
INTERNATIONAL MAXFORCE DT466	230	72-84 PASSENGER "RE"
INTERNATIONAL MAXFORCE DT466	250	78-84 PASSENGER "RE"
CATERPILLAR C-7 Cummins ISB	190	34-52 PASSENGER TYPE "C"
CATERPILLAR C-7 Cummins ISB	210	66-72 PASSENGER TYPE "C"
CATERPILLAR C-7 Cummins ISB	210	66-78 PASSENGER "FE"
CATERPILLAR C-7 Cummins ISB	230	72-84 PASSENGER "RE"
CATERPILLAR C-7 Cummins ISB	250	72-84 PASSENGER "RE"
MERCEDES MBE 900	190	34-52 PASSENGER TYPE "C"
MERCEDES MBE 900	210	66-72 PASSENGER TYPE "C"
MERCEDES MBE 900	210	66-78 PASSENGER "FE"
MERCEDES MBE 900	230	72-84 PASSENGER "RE"
MERCEDES MBE 900	250	72-84 PASSENGER "RE"

2. Page 31, Add Cummins ISB to chart as standard engine to transmission chart. Delete Caterpillar C-7 and Mercedes MBE 900.

The following engines shall be equipped with the following automatic transmissions:

Engine	Horsepower	Capacity	Transmission	Standard/Option
INTERNATIONAL DT466E	190	34-52	PTS2500	STANDARD
INTERNATIONAL DT466E	215	66	PTS2500	STANDARD
INTERNATIONAL DT466E	215	66	PTS3000	OPTION
INTERNATIONAL DT466E	215	72-C	PTS3000	STANDARD
INTERNATIONAL DT466E	215	66-78 FC	PTS3000	STANDARD

Engine	Horsepower	Capacity	Transmission	Standard/Option
INTERNATIONAL DT466E	230-250	72-84 RE	PTS3000	STANDARD
CAT C 7 Cummins ISB	190	34-52	PTS2500	STANDARD
CAT C 7 Cummins ISB	210	66	PTS2500	STANDARD
CAT C 7 Cummins ISB	210	66	PTS3000	OPTION
CAT C 7 Cummins ISB	210	72-C	PTS3000	STANDARD
CAT C 7 Cummins ISB	210	66-78 FC	PTS3000	STANDARD
CAT C 7 Cummins ISB	230-250	72-84 RE	PTS3000	STANDARD
MERCEDES MBE 900	190	34-52	PTS2500	STANDARD
MERCEDES MBE 900	210	66	PTS2500	STANDARD
MERCEDES MBE 900	230	66	PTS3000	OPTION
MERCEDES MBE 900	230	72-C	PTS3000	STANDARD
MERCEDES MBE 900	230	66-78 FC	PTS3000	STANDARD
MERCEDES MBE 900	230-250	72-84 RE	PTS3000	STANDARD

3. Page 31, delete engine add drive train (Engine, Transmission, Differential, and Drive lines.)

WARRANTY

Chassis warranties shall be the manufacturer's standard, twelve thousand (12,000) miles or twelve (12) months. Any chassis or chassis component warranty extension greater than standard warranty coverage shall be made available to purchasers. THE IN-SERVICE DATE OF THE CHASSIS WARRANTY SHALL BE STATED AS PART OF THE INVITATION TO BID ON KENTUCKY SCHOOL BUSES. (Normally August 15) One copy of the chassis/body manufacturer's bus warranty and service handbook shall be shipped to each purchasing school district.

All ~~engine-drive train (Engine, Transmission, Differential and Drivelines)~~ warranties shall be a minimum five-year unlimited miles with one hundred (100) percent parts and labor.

4. Page 56, change light type to Light Emitting Diode (LED) lamps

BACK-UP LAMPS

The school bus body manufacturer shall install two (2) back-up lamps, located on the left and right rear of the body as far outboard and as low as practical. These back-up lights shall be Weldon ~~2025-7100-30.~~ Grote or Sound Off Signal Co L.E.D. lights or prior approved equal.

5. Page 60 Change lamp type to strobing LED. Delete parts that are no longer available.

STOP SIGNAL ARM

Each school bus body shall be equipped with a stop arm meeting SAE Standard J1133. The location of the stop arm requires prior approval from the Pupil Transportation Branch and shall be:

1. Air-operated, SMC ~~2900~~ 2970 or ~~Transpec Model 6000~~ series with wind guard and high intensity school decal or approved equal, or
2. Electric operated, ~~SMC 5900~~ Transpec Model ~~6000~~ 6100 series with wind guard and high intensity school decal or approved equal.

The lights on these stop arms shall be strobing LED. Air-operated stop arms shall be installed on all chassis equipped with air brakes. An air-operated or electric-operated stop arm may be installed on all school bus chassis with hydraulic brakes.

6. Page 30, Add sentence to require Transynd or BXL250A specification fluid in all Allison transmissions.

TRANSMISSION (AUTOMATIC)

Chassis, thirty-four (34) through eighty-four (84) -passenger capacities, equipped with spring-loaded rear axle parking brakes, may be purchased with an automatic transmission.

The automatic transmission shift quadrant shall be dash mounted and located to the right of the steering column, accessible to the driver and approved by the Pupil Transportation Branch. The gearshift quadrant shall be covered by a scabbard and lighted, with provision for a backup and neutral safety switch and a positive lock shift with the reverse position forward.

Buses equipped with 3000 PTS transmissions may utilize a touch pad shifting mechanism. All 2500 series transmissions shall be equipped with an Allison approved cable controlled scabbard shift.

All Allison automatics shall be filled with Transynd fluid or prior approved equal.

7. Page 53, Add to note at the bottom of the page to clarify the function of the step well heater.

HEATERS

School bus heating systems shall meet the following performance standards:

- A. Provide evenly distributed heat throughout the bus body.
- B. Provide defrosting for the windshield and entrance door.
- C. Have capabilities of providing evenly distributed heat, creating a temperature rise to 50 degrees Fahrenheit inside the body shell when soaked in an ambient temperature of 0 degrees Fahrenheit for fifteen (15) hours.
- D. The heater water flow shall be controlled by the installation of bulkhead mounted water shutoff valves. (Water shutoff valves and bulkhead mounts shall require approval from the Pupil Transportation Branch. Refer to heater valve drawings of the appendix.)
- E. Valves shall be one-quarter ($\frac{1}{4}$) turn, ball-type, and have a minimum nominal three quarters ($\frac{3}{4}$) inch internal port.
- F. The heater hose entrance through the firewall or floor shall be through prior approved bulkhead fittings.
- G. Type C – FC buses shall have all drivers' heaters air duct extended beyond the drivers side modesty panel into the passengers area a minimum of four (4) feet.
- H. Total heater electrical load, including defroster fans, shall be no more than forty-five (45) amperes.
- I. Switching for heaters shall provide independent switches for each motor.
- J. Type C and type D bus heaters shall have easily removable air filters.

NOTE: ALL TYPE C AND D BUSES REQUIRE A STEP WELL HEATER OF A MINIMUM 50,000 BTU OUTPUT AS A PART OF THEIR TOTAL HEATER SYSTEM. THIS HEATER SHALL HAVE A DUCT LOUVERED TO BLOW DIRECTLY AGAINST THE ENTRANCE DOOR GLASS AT THE LOWEST PRACTICAL POINT. THESE LOUVERS SHALL BE

FIXED TO ENSURE THE CLEARANCE OF MOISTURE FROM THE LOWER GLASS.

8. PAGE 63, Add under the heading, LETTERING, NAME OF PRIVATE OWNER. No other wording, symbols or signs may be placed on any Kentucky school bus, inside or out, other than what is listed in the Kentucky Minimum Specifications for School Buses. Any wording that a school district wishes to add, or has added, to a Kentucky school bus, regardless of model year, must be approved in writing, before their placement, by the Kentucky Department of Education.
9. Add page 65, add PASSENGER ADVISORY SYSTEM.
All Kentucky school buses shall be equipped with a passenger advisory system. This system shall be armed by the operation of the eight way light system. When the key is placed in the off position the dome lights shall be activated. The driver will have sixty seconds to walk to the rear of the bus and deactivate the system by either raising the rear emergency door handle or pressing a button on the rear bulk head. The system will confirm the system deactivation by turning off or flashing the dome lights. If the driver fails to deactivate the system the headlights will flash and the horn will sound.

Page 87. Delete padding kit on electro-hydraulic lift.

ELECTRO-HYDRAULIC LIFT

Type "C" thirty-four (34) through sixty-six (66) passenger and type "A" twenty-two (22) passenger school buses may be equipped with an electro-hydraulic lift.

Thirty-four (34) through sixty-six (66) passenger body shells shall be equipped with a Braun Millennium series hydraulic lift Model L917IB ~~with padding kit~~ or Ricon S series S5510 ~~with padding kit~~.

10. Add, page 99 Add. BACK-UP ALARM UPGRADE

Local districts may add a distance sensing backing alarm as a supplement to the standard backing alarm. This backing alarm shall be Steelmate model PTS400T, PTSW1 or CS Model 8906 and shall be used in addition to the standard alarm